



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/804,400

03/19/2004

Pradeep Bahl

M1103.70179US00

7359

45840

7590

10/31/2007

WOLF GREENFIELD (Microsoft Corporation)
C/O WOLF, GREENFIELD & SACKS, P.C.
600 ATLANTIC AVENUE
BOSTON, MA 02210-2206

EXAMINER

BATURAY, ALICIA

ART UNIT

PAPER NUMBER

2155

MAIL DATE

DELIVERY MODE

10/31/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/804,400

Applicant(s)

BAHL, PRADEEP

Examiner

Alicia Baturay

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 05/31/05, 09/26/05.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-30 are presented for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 6, 7, 11-13, 16, 17, 21-23, 26 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Comstock (U.S. 6,452,920).

4. With respect to claim 1, Comstock teaches a method for facilitating maintaining connectivity between a mobile network node and a correspondent node after the mobile network node changes addresses, the method comprising perform, by the mobile node, the steps of:

Registering an address, for the mobile node, with an authoritative name server, wherein the registering step comprises: specifying a current address for the mobile node (Comstock, col. 1, line 63 – col. 2, line 7), and specifying a supplementary value that ensures the current address will not be cached within non-authoritative name servers (Comstock, col. 2, lines 26-34).

5. With respect to claim 2, Comstock teaches the invention described in claim 1, including the method of further comprising the steps performed by the mobile node of:

Connecting to a new network location (Comstock, col. 1, lines 31-33); receiving a second network address differing from the current address previously registered with the authoritative name server (Comstock, col. 1, line 63 – col. 2, line 7); registering the second network address with the authoritative name server; and issuing a first binding update to a correspondent node to which a connection was previously created while the mobile node resided at the first network address, wherein a specified destination address for the first binding update specifies a first correspondent node address (Comstock, col. 2, lines 15-25).

6. With respect to claim 3, Comstock teaches the invention described in claim 2, including the method further comprising the steps of:

Receiving, by the mobile node, a binding update acknowledgement from the correspondent node; and restoring a disrupted connection between the mobile node and correspondent node (Comstock, col. 3, lines 28-39).

7. With respect to claim 6, Comstock teaches the invention described in claim 2, including the method wherein the new network location resides outside a home network of the mobile node, and wherein the method comprises the further step of:

Establishing a tunnel connection between the mobile node and a virtual private network server; receiving, by the mobile node, a local network address specified by the virtual private

network server, wherein the second network address corresponds to the local network address (Comstock, col. 3, lines 28-39).

8. With respect to claim 7, Comstock teaches the invention described in claim 2, including the method further comprising the step of:

Initiating, by the mobile node, a binding connection through a rendezvous server residing outside the home network (Comstock, col. 3, lines 28-39).

9. Claims 11-13, 16, 17, 21-23, 26 and 27 do not teach or define any new limitations above claims 1-3, 6 and 7 and therefore are rejected for similar reasons.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 4, 5, 8-10, 14, 15, 18-20, 24, 25 and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Comstock and further in view of Millet et al. (U.S. 6,434,627).

Comstock teaches the invention substantially as claimed including when terminating packets destined for a mobile node are received by a home network for the mobile node, the

Mobile IP binding is used to obtain the address of a foreign network to which the mobile node is attached. A Layer 2 Tunneling Protocol tunnel is created between the home network and the foreign network, and an outgoing L2TP call is made from the home network to the foreign network. A call is made from the foreign network to the mobile node, and a PPP session is established between the home network and the mobile node, via the Layer 2 Tunneling Protocol tunnel between the home network and the foreign network. After the PPP session is established the home network can optionally assign the mobile node a private IP address, and translate the home IP address labeling the terminating packets to the private IP address (see Abstract).

12. With respect to claim 4, Comstock teaches the invention described in claim 2, including the method wherein the mobile node performs the further steps of: registering a binding update failure with regard to the first binding update issued to the correspondent node at the first correspondent node address (Comstock, col. 5, lines 2-7).

Comstock does not explicitly teach issuing a naming query requesting the address of a node.

However, Millet teaches issuing a naming query requesting a current address of the correspondent node (Millet, col. 10, lines 22-42).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Comstock in view of Millet in order to enable issuing a naming query requesting the address of a node. One would be motivated to do so in order to enable address

translation systems for mapping IP addresses of the mobile nodes to globally unique IP addresses available on a network where mobile nodes temporarily attach.

13. With respect to claim 5, Comstock teaches the invention described in claim 4, including the method further comprising the steps performed by the mobile node of: issuing a second binding update to the correspondent node, wherein a specified destination address for the second binding update specifies the second correspondent node address (Comstock, col. 4, line 66 – col. 5, line 7).

Comstock does not explicitly teach issuing a naming query requesting the address of a node.

However, Millet teaches receiving a naming query response to the naming query including a second correspondent node address for the correspondent node that differs from the first correspondent node address (Millet, col. 10, lines 22-51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Comstock in view of Millet in order to enable issuing a naming query requesting the address of a node. One would be motivated to do so in order to enable address translation systems for mapping IP addresses of the mobile nodes to globally unique IP addresses available on a network where mobile nodes temporarily attach.

14. With respect to claim 8, Comstock teaches the invention described in claim 2, including the method of further comprising the steps performed by the mobile node of: connecting to a new network location (Comstock, col. 1, lines 31-33); receiving a second network address

differing from the current address previously registered with the authoritative name server (Comstock, col. 1, line 63 – col. 2, line 7); registering the second network address with the authoritative name server; and issuing a first binding update to a correspondent node to which a connection was previously created while the mobile node resided at the first network address, wherein a specified destination address for the first binding update specifies a first correspondent node address (Comstock, col. 2, lines 15-25).

Comstock does not explicitly teach issuing a naming query requesting the address of a node.

However, Millet teaches the method further comprising the step of: Issuing a naming query requesting a current address of the correspondent node, before receiving a response to the first binding update (Millet, col. 10, lines 22-42).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Comstock in view of Millet in order to enable issuing a naming query requesting the address of a node. One would be motivated to do so in order to enable address translation systems for mapping IP addresses of the mobile nodes to globally unique IP addresses available on a network where mobile nodes temporarily attach.

15. With respect to claim 9, Comstock teaches the invention described in claim 8, including the method further comprising: issuing a second binding update to the correspondent node, wherein a specified destination address for the second binding update specifies the second correspondent node address (Comstock, col. 4, line 66 – col. 5, line 7).

Comstock does not explicitly teach issuing a naming query requesting the address of a node.

However, Millet teaches receiving a naming query response to the naming query including a second correspondent node address for the correspondent node; determining that the second correspondent node address differs from the first correspondent node address (Millet, col. 10, lines 22-51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Comstock in view of Millet in order to enable issuing a naming query requesting the address of a node. One would be motivated to do so in order to enable address translation systems for mapping IP addresses of the mobile nodes to globally unique IP addresses available on a network where mobile nodes temporarily attach.

16. With respect to claim 10, Comstock teaches the invention described in claim 9, including the method wherein the issuing a second binding update step is initiated based upon the determining step, and is therefore not dependent upon registering a failure of the first binding update issued to the correspondent node (Comstock, col. 4, line 66 – col. 5, line 7).
17. Claims 14, 15, 18-20, 24, 25 and 28-30 do not teach or define any new limitations above claims 4, 5 and 8-10 and therefore are rejected for similar reasons.

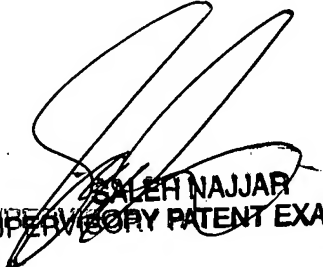
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Baturay whose telephone number is (571) 272-3981. The examiner can normally be reached at 7:30am - 5pm, Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alicia Baturay
October 25, 2007


SALEH NAJJAR
SUPERVISORY PATENT EXAMINER